Commercial Space Transportation License

License Number: LLS 17-100

SPACE EXPLORATION TECHNOLOGIES

is authorized, subject to the provisions of 51 USC Subtitle V, ch. 509, and the orders, rules, and regulations issued under it, to conduct launches.

General. Space Exploration Technologies is authorized to conduct:

- (i) Flights of Falcon 9 Version 1.2 launch vehicles from Complex 39A at Kennedy Space Center (KSC) in support of the NASA Commercial Resupply Services missions, each transporting a Dragon capsule to low Earth orbit; and
- (ii) pre-flight ground operations at KSC associated with the flights, as identified in paragraph (i) of this license, of the Falcon 9 Version 1.2 launch vehicles.

This license is granted subject to the terms, conditions, and limitations set forth in licensing orders A, B, C, and D and any subsequent orders issued by the Office of Commercial Space Transportation.

The licensee shall at all times conduct its operations in accordance with the regulations prescribed by the Office of Commercial Space Transportation for the activities authorized by this license.



US Department of Transportation Federal Aviation Administration Issued: February 17, 2017

Effective: February 17, 2017

Manager, Licensing and Evaluation Division

lenneth li

800 Independence Ave., S.W. Washington, D.C. 20591

LAUNCH

AUTHORIZED BY LICENSE NO. LLS 17-100 ISSUED TO

SPACE EXPLORATION TECHNOLOGIES

- 1. <u>Authority</u>: This Order is issued to Space Exploration Technologies, referred to as SpaceX, under 51 U.S.C. subtitle V, chapter 509, and 14 C.F.R. Ch. III.
- 2. Purpose: This Order modifies License No. LLS 17-100 issued concurrently by the Federal Aviation Administration's Office of Commercial Space Transportation, authorizing SpaceX to conduct launches of Falcon 9 Version 1.2 launch vehicles; and prescribes as conditions to License No. LLS 17-100 certain requirements applicable to the launches.
- 3. <u>Definitions</u>: For purposes of License No. LLS 17-100 and any orders issued by the FAA pertaining to activities covered by License No. LLS 17-100:
 - (i) "Flight" shall mean the flight of a Falcon 9 Version 1.2 launch vehicle, commencing with ignition of the first stage from Kennedy Space Center (KSC) and transporting the Dragon capsule to low Earth orbit. Flight includes landing of the Falcon 9 Version 1.2 first stage as indicated in the license application. A flight is concluded upon SpaceX's last exercise of control over the Falcon 9 Version 1.2 vehicle, including the safing of Falcon 9 Version 1.2 vehicle stages or components that reach Earth orbit, following separation of the payload.
 - (ii) "Pre-flight ground operations" shall mean SpaceX's pre-flight preparations of a Falcon 9 Version 1.2 launch vehicle at KSC, beginning with the arrival of the Falcon 9 Version 1.2 vehicle at KSC.

- Special Reporting Requirements: In addition to all 4. applicable reporting requirements under 14 C.F.R. Ch. III, SpaceX:
 - (a) Must comply with 14 C.F.R. § 415.59 for any secondary payloads not later than 60 days before any flight conducted under this license and
 - (b) Identify any anomaly occurring on a prior launch conducted under this license that could be material to public safety no later than 15 days before any flight conducted unless the requirement of 14 C.F.R. § 417.25(a) has already been satisfied.
- 5. License Term: The term of License No. LLS 17-100 authorizing SpaceX to conduct launches is two (2) years from the effective date of this license order.

OFFICE OF COMMERCIAL SPACE TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

By:

Kenneth Wong, Manager

Licensing and Evaluation Division

Issued: February 17, 2017

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FLIGHT

AUTHORIZED BY LICENSE NO. LLS 17-100 ISSUED TO

SPACE EXPLORATION TECHNOLOGIES

- 1. <u>Authority</u>: This Order is issued to Space Exploration Technologies, referred to as SpaceX, under 51 U.S.C. subtitle V, chapter 509, and 14 C.F.R. Ch. III.
- 2. Purpose: This Order modifies License No. LLS 17-100 issued concurrently by the Federal Aviation Administration's Office of Commercial Space Transportation, authorizing SpaceX to conduct launches of Falcon 9 Version 1.2 launch vehicles; and prescribes as conditions to License No. LLS 17-100 certain requirements applicable to the authorization to conduct the flights of these launch vehicles.
- 3. <u>Authorization</u>: SpaceX is authorized to conduct flights of launch vehicles:
 - (a) Using a Falcon 9 Version 1.2 launch vehicle;
 - (b) From Complex 39A at Kennedy Space Center, Florida;
 - (c) On an nominal launch azimuth of 43.7 degrees;
 - (d) Transporting to low Earth orbit a Dragon capsule; and
 - (e) According to the launch vehicle, launch vehicle systems, and safety management program represented in the SpaceX application as of the date of this order, and any amendments to the license application approved by the FAA, in writing.

OFFICE OF COMMERCIAL SPACE TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

Kenneth Wong, Manager Licensing and Evaluation Division

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PRE-FLIGHT GROUND OPERATIONS

AUTHORIZED BY LICENSE NO. LLS 17-100 ISSUED TO

SPACE EXPLORATION TECHNOLOGIES

- 1. <u>Authority</u>: This Order is issued to Space Exploration Technologies, referred to as SpaceX, under 51 U.S.C. subtitle V, chapter 509, and 14 C.F.R. Ch. III.
- 2. Purpose: This Order modifies License No. LLS 17-100 issued concurrently by the Federal Aviation Administration's Office of Commercial Space Transportation, authorizing SpaceX to conduct launches of Falcon 9 Version 1.2 launch vehicles; and prescribes as conditions to License No. LLS 17-100 certain requirements applicable to the authorization to conduct pre-flight ground operations.
- 3. <u>Authorization</u>: SpaceX is authorized to conduct pre-flight ground operations at Kennedy Space Center (KSC) associated with launches of Dragon capsules on Falcon 9 Version 1.2 launch vehicles.

OFFICE OF COMMERCIAL SPACE TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

By:

Kenneth Wong, Manager

Licensing and Evaluation Division

Issued: February 17, 2017 Effective: February 17, 2017

FINANCIAL RESPONSIBILITY REQUIREMENTS

Under License No. LLS 17-100
Issued to

SPACE EXPLORATION TECHNOLOGIES

- 1. <u>Authority</u>: This Order is issued to Space Exploration Technologies, referred to as SpaceX, under 51 U.S.C. Subtitle V, chapter 509, and 14 C.F.R. part 440.
- 2. <u>Purpose</u>: This Order modifies License No. LLS 17-100 issued concurrently by the Federal Aviation Administration's Office of Commercial Space Transportation, by prescribing financial responsibility requirements for licensed launch activities in accordance with 14 C.F.R. part 440.
- 3. <u>Definitions</u>: For purposes of this Order, "licensed launch activities" shall mean activities authorized by the License. Other terms used in this Order are defined in accordance with 14 C.F.R. § 440.3.
- 4. <u>Liability Insurance</u>: SpaceX shall maintain a policy or policies of liability insurance (or otherwise demonstrate financial responsibility) in accordance with 14 C.F.R. § 440.9(b) in the amount of:
 - (a) One Hundred Sixty Million Dollars (\$160,000,000) for covered claims resulting from flight of the Falcon 9 Version 1.2 launch vehicle from Kennedy Space Center (KSC) and
 - (b) Twelve Million Dollars (\$12,000,000) for covered claims resulting from pre-flight operations performed at KSC.

- 5. Government Property Insurance: SpaceX shall maintain a policy or policies of insurance (or otherwise demonstrate financial responsibility) in accordance with 14 C.F.R § 440.9(d) in the amount of:
 - (a) One Hundred Million Dollars (\$100,000,000) for covered claims resulting from flight of the Falcon 9 Version 1.2 launch vehicle from KSC and
 - (b) Sixty-Three Million Dollars (\$63,000,000) for covered claims resulting from pre-flight operations performed at KSC.
- 6. Covered property includes all property owned, leased, or occupied by, or within the care, custody, or control of, the United States and its agencies, and its contractors and subcontractors involved in licensed launch activities, at KSC.

OFFICE OF COMMERCIAL SPACE TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

Bv:

Kenneth Wong, Manager

Licensing and Evaluation Division

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